



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW6305G00232-3G-PO

Job Sheet 187034



Part No: RBW6305G00232-3G-PO

Job Qty: 1 pcs

Part Name: Gimbal Torque Tube Bushing Installer



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/26/18

Job Tracking No:

Due Date: 12/14/18

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBW6305G00232-3G Rev 2 IPP Rev A 18.11.26 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	Purchasing	1 pcs	12/14/18		0.00	0.00	Purchasing - 1	<i>SLH</i>
							Purchasing - 2	
							Purchasing - 3	
110	Packaging 2-1 - Receive - B4B	1 pcs	12/14/18		0.00	0.00	Packaging 2 - 1 - B4B	<i>SLH</i>
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	
120	QC 6	1 pcs	12/14/18		0.00	0.00	QC 6 - 16	<i>DAS</i>
							QC 6 - 38	
							QC 6 - 42	
							QC 6 - 9	
							QC 6 - 68	
130	Packaging 3-1 - Stock - B4B	1 pcs	12/14/18		0.00	0.00	Packaging 3 - 1 - B4B	<i>DAS</i>
							Packaging 3 - 2 - B4B	
							Packaging 3 - 3 - B4B	
							Packaging 3 - 4 - B4B	
							Packaging 3 - 5 - B4B	
140	QC 21 - SA	1 pcs	12/14/18		0.00	0.00	QC 21 - SA - 16	<i>DAS</i>
							QC 21 - SA - 21	

Part Op 100 - Issue P/O to ARROW TECH MACHINE WORKS ; P/O #041834 - Manufacture RBW6305G00232-3G as
Descriptions: per DWG. -Certificate of Conformity is required
110 - Certificate of Conformity is required

NOV 26.2018 x 1 RCL

GA 085

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6305G00232-3GP	Gimbal Torque Tube Bushing Installer	1 (1 ea)	100-Purchasing	<i>5140232</i>

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6305G00232-3GP	1	0	0



Container No: S140233



Part: RBW6305G00232-3G

Job No: 187034

Serial No/Batch: S140233

Revision: 2

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA

TEL : 1 813 632-5200

Email: sales@dartaero.com
www.dartaerospace.com

Date: 12/24/18

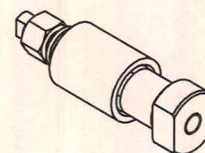
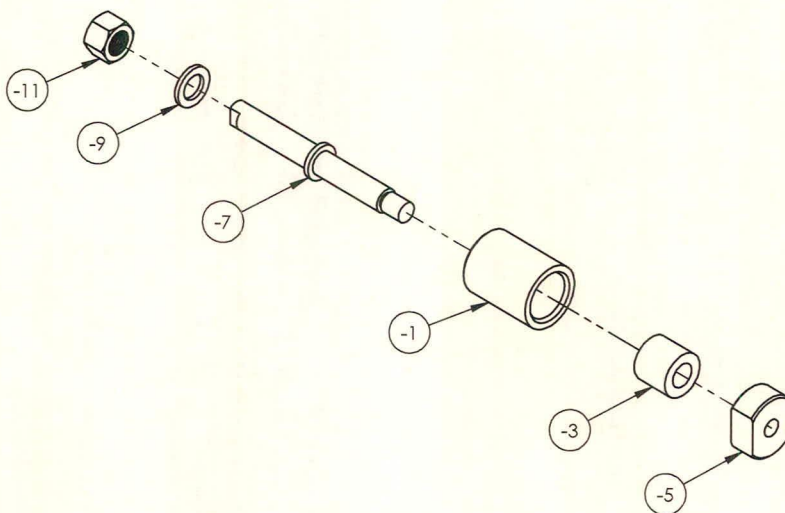
Part Specifications

Specifications could not be found.

Plex 11/26/18 2:38 PM dart.Lussier.Patrick

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		BROKE OUT INTO INDIVIDUAL TOOL FROM KIT RBW6305G00132-3G.	4/7/2011	RJC	
1		-3 CH'D I.D. ADDED TOLERANCE WAS $\varnothing.379$ IS $\varnothing.375 \pm .005$ - .000. -7 CH'D O.D. ADDED TOLERANCE WAS $\varnothing.375$ IS $\varnothing.370 \pm .000$ - .005	5/3/2013	CFS	GE
2	15-0292	-1, -3, -5 CH'D MATERIAL CALL OUT WAS 4140 Q&T IS 4140 Q&T / 4142 Q&T. -7 CH'D MATERIAL CALL OUT WAS 4140 Q&T IS 4140 Q&T / 4142 Q&T. CH'D DIM WAS $\varnothing.317$ IS $\varnothing.315$. WAS .030 IS .05 WAS .040 IS .04.	9/10/2015	RJC	JAG



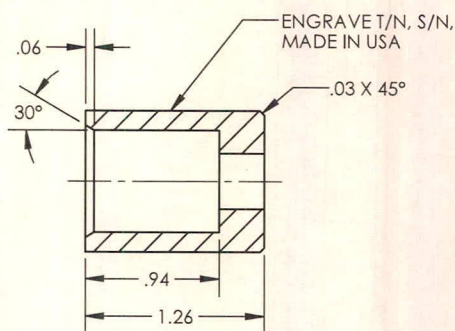
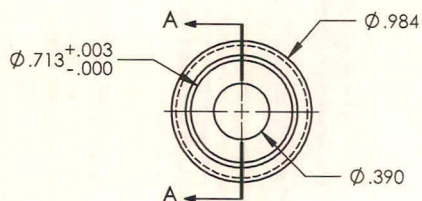
NOTE:
ALSO SOLD WITH KIT RBW6305G00132-3G.

		TITLE	
		GIMBAL TORQUE TUBE BUSHING INSTALLER	
DWG NO.		REV	
RBW6305G00232-3G		2	
MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm$.005 FRACTIONS $\pm$ 1/8 .XX $\pm$.01 ANGLES $\pm$ 6° .X $\pm$.1 1. BREAK ALL SHARP EDGES .015 x 45° OR .016R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	DRAWN BY: PERRITT APPROVED: <i>D. Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL AGUSTA	
SCALE 1:1	DATE 4/7/2011	SHEET 1 OF 5	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	BASE	4140 Q&T / 4142 Q&T		2
			-3	1	GUIDE	4140 Q&T / 4142 Q&T		3
			-5	1	STOP	4140 Q&T / 4142 Q&T		4
			-7	1	STUD	4140 Q&T / 4142 Q&T		5
		B/O	-9	1	WASHER	STEEL	$\varnothing.3/8$ I.D. AN960-616L	1
		B/O	-11	1	HEX NUT	STEEL	3/8-24 UNF AN315-6	1

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
2	15-0292	-1 CH'D MATERIAL CALL OUT WAS 4140 Q&T IS 4140 Q&T / 4142 Q&T.	9/10/2015	RJC
				JAG



SECTION A-A

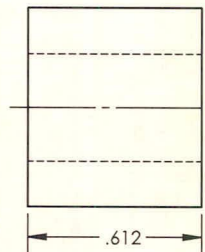
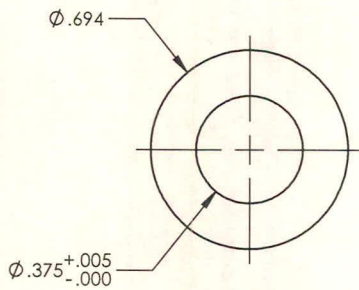
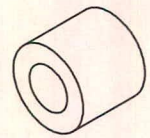
(-1)

BASE

DART AEROSPACE	
TITLE GIMBAL TORQUE TUBE BUSHING INSTALLER	
DWG NO. RBW6305G00232-3G-1	REV 2
MAT'L 4140 Q&T / 4142 Q&T	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D. Weir</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT
.XX ± .01 ANGLES ± 5°	TREAT
.X ± .1	FINISH CAD PLATE YELLOW
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC QQ-P-416, TYPE II, CLASS II
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	AGUSTA
SCALE 1:1	DATE 4/7/2001
	SHEET 2 OF 5

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-3 CH'D I.D. ADDED TOLERANCE WAS $\phi .379$ IS $\phi .375 +.005 -.000$.	5/3/2013	CFS	GE
2	15-0292	-3 CH'D MATERIAL CALL OUT WAS 4140 Q&T IS 4140 Q&T / 4142 Q&T.	9/10/2015	RJC	JAG



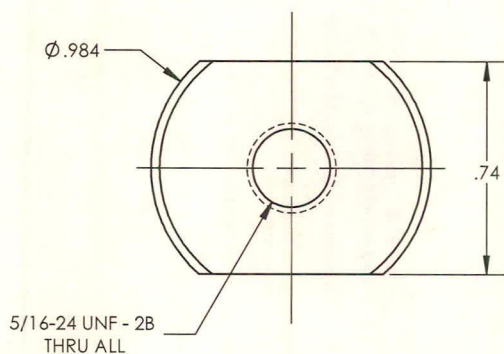
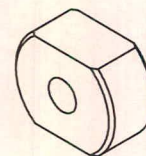
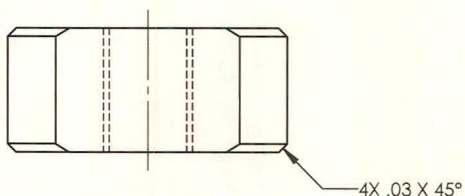
(-3)

GUIDE

DART AEROSPACE	
TITLE GIMBAL TORQUE TUBE BUSHING INSTALLER	
DWG NO. RBW6305G00232-3G-3	REV 2
MAT'L 4140 Q&T / 4142 Q&T	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D. Weil</i>
.XXX $\pm .005$	HEAT
.XX $\pm .01$	TREAT
.X $\pm .1$	FINISH CAD PLATE YELLOW
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC QQ-P-416, TYPE II, CLASS II
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	AGUSTA
SCALE 2:1	DATE 4/7/2011
	SHEET 3 OF 5

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0292	-5 CH'D MATERIAL CALL OUT WAS 4140 Q&T IS 4140 Q&T / 4142 Q&T.	9/10/2015	RJC	JAG

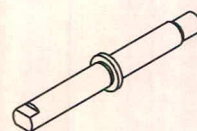
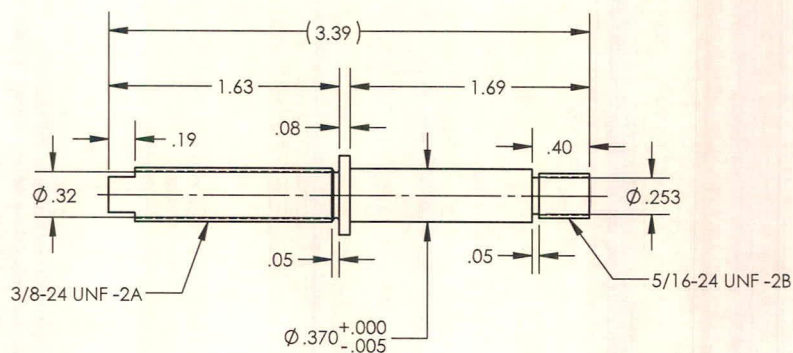
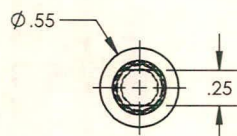


(-5)
STOP

DART AEROSPACE	
TITLE GIMBAL TORQUE TUBE BUSHING INSTALLER	
DWG NO. RBW6305G00232-3G-5	REV 2
MAT'L 4140 Q&T / 4142 Q&T	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D. Weir</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT
.XX ± .01 ANGLES ± 6°	TREAT
.X ± .1	FINISH CAD PLATE YELLOW
1. BREAK ALL SHARP EDGES .015 x 45°	SPEC QQ-P-416, TYPE II, CLASS II
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	AGUSTA
SCALE 2:1	DATE 4/7/2011
	SHEET 4 OF 5

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-7 CH'D O.D. ADDED TOLERANCE WAS $\varnothing .375$ IS $\varnothing .370 + .000-.005$.	5/3/2013	CFS	GE
2	15-0292	-7 CH'D MATERIAL CALL OUT WAS 4140 Q&T IS 4140 Q&T / 4142 Q&T. CH'D DIM WAS $\varnothing .317$ IS $\varnothing .315$, WAS $.030$ IS $.05$ WAS $.040$ IS $.04$.	9/10/2015	RJC	JAG



(-7)

STUD

DART AEROSPACE	
TITLE: GIMBAL TORQUE TUBE BUSHING INSTALLER	
DWG NO.: RBW6305G00232-3G-7	REV: 2
MAT'L: 4140 Q&T / 4142 Q&T	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED: <i>D. Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .01 ANGLES ± .5°	FINISH: CAD PLATE YELLOW
.X ± .1	SPEC: QQ-P-416, TYPE II, CLASS II
1. BREAK ALL SHARP EDGES .016 x 45° OR .016R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	AGUSTA
SCALE: 1:1	DATE: 4/7/2011
SHEET 5 OF 5	



**PHGE Machineworks dba
Arrowtech Machineworks**
29751 E Enid Rd. Unit C
Eugene, Oregon 97402
Phone: (541) 780-6938
Fax: (458) 215-4938

Packing Slip

NO. 350 ✓

Date: 12/11/2018
PO Ref: PO # 041834 ✓
Ship via: Fedex Priority

Bill To:
Dart Aerospace
1270 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K7

Ship To:
Dart Aerospace
1271 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K8

Qty	Item	Part No.
1 ✓	GIMBAL TORQUE TUBE BUSHING REMOVER	RBW6305G01232-3G ✓
1 ✓	GIMBAL TORQUE TUBE BUSHING INSTALLER	RBW6305G00232-3G ✓

Received by: _____

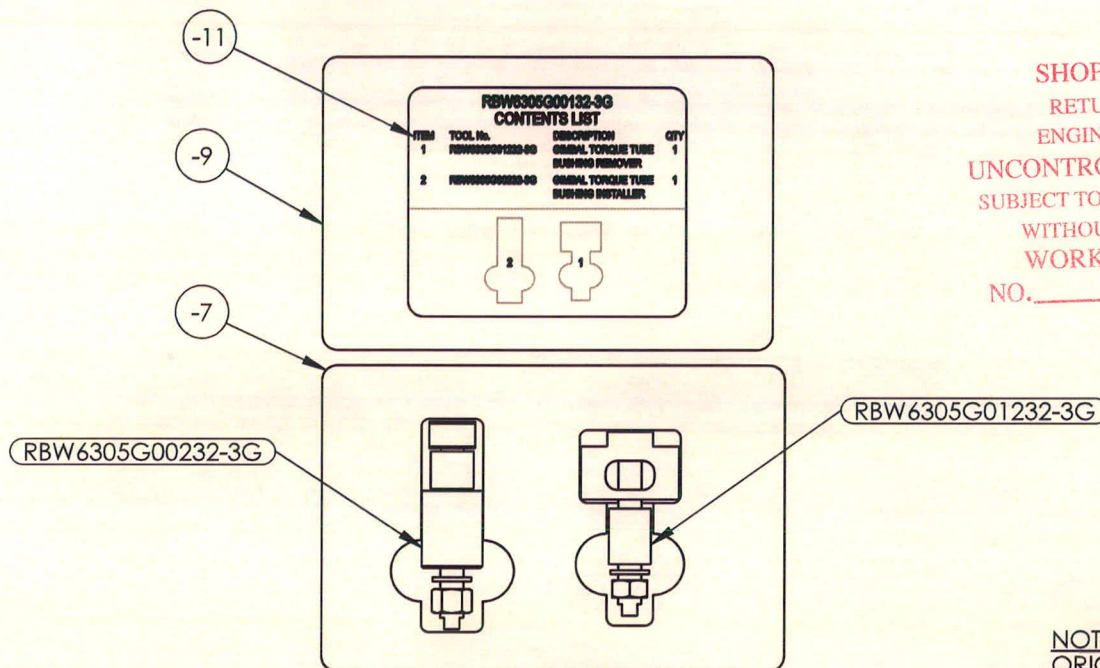
Packaged by: _____

Checked by: _____

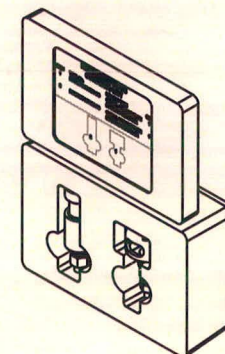
Thank You

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-29 CH'D THICKNESS FROM .31. -31 CORRECTED TOOL NUMBERS.	5/11/2011	RJC	RW
3		-7 CH'D CUTOUTS FROM .87 TO 1.00, AND 1.60 TO 1.62. ADDED FINGER GRAB CUTOUTS. -9 CH'D PLACARD CUTOUT DEPTH FROM .07 TO .10.	10/29/2012	RJC	SE
3A		-7 CH'D DIM WAS R.125 IS R.13. -9 ADDED SECTION A-A, CH'D DEPTH WAS .10 IS .13, CH'D DIM WAS R.375 IS R.38. -11 CH'D DIM WAS .06 IS (.06).	5/5/2014	DPD	RJC
4	15-0322	-9 CH'D DIMS WAS 4.75 IS 4.80, WAS 7.13 IS 7.30, WAS .40 IS .72, WAS 6 IS 4.50, WAS 3.00 IS 3.75 WAS 4X R.38 IS 4X R.25. -11 CH'D DIMS WAS 2.50 IS 3.75, WAS 6.00 IS 4.50 WAS R.38 IS R.25. ADDED TOOL OUTLINES & ITEM NUMBERS.	10/5/2015	RJC	JAG



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. _____



NOTES:
ORIGINAL No. FOR REFERENCE ONLY:
RBW6305G00132-3G = 3G6305G00132

DART AEROSPACE	
TITLE GIMBAL BUSHING KIT	
DWG NO. RBW6305G00132-3G	REV 4
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/8 ANGLES ± 5° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	DRAWN BY: PERRITT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL AGUSTA
SCALE 1:3	DATE 1/13/2009 SHEET 1 OF 4

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
				1	GIMBAL TORQUE TUBE BUSHING REMOVER		RBW6305G01232-3G	1
				1	GIMBAL TORQUE TUBE BUSHING INSTALLER		RBW6305G00232-3G	1
		B/O	-5	1	CASE	PLASTIC	PELICAN #APP1120-E	N/S
		B/O	-7	1	BOTTOM FOAM	Y20 BLACK	2-5/8 X 5 X 7-1/2 I.R. SPECIALTY FOAM	2
		B/O	-9	1	TOP FOAM	Y20 BLACK	23/32X 4-3/4 X 7-5/16 I.R. SPECIALTY FOAM	3
			-11	1	PLACARD	PLASTIC		4



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041834**

Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No: PO041834
PO Date: 11/23/18
Due Date: 12/14/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Lussier, PatrickPhone:

Ship To:

Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	187033	RBW6305G01232-3GP			Gimbal Torque Tube Bushing Remover REV 3	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$940.475/Ea	\$940.48
1X DEC 24 2018 SK													
Line Item Note SUB ASSY FOR TOP LEVEL RBW6305G00132-3G (REV4)													
2	187034	RBW6305G00232-3GP			Gimbal Torque Tube Bushing Installer REV 3	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$940.475/Ea	\$940.48
1X DEC 24 2018 SK													
Line Item Note SUB ASSY FOR TOP LEVEL RBW6305G00132-3G (REV4)													
												Grand Total: \$1,880.95	

ORDER 7373

06 Jan 2019

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses
A005 RIGHT OF ENTRY
A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
A049 SUPPLIER AWARENESS

Plex 11/26/18 2:54 PM dart.Lussier.Patrick

DEC 3 4 2018

DEC 3 4 2018



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No:041834 ✓ Dated: 12/11/2018

Our Order / Job No:041834-2AWT Order Qty: 1 ✓

Part Name: GIMBAL TORQUE TUBE BUSHING INSTALLER

Part Number: RBW6305G00232-3G ✓

Lot Size:N/A Ship Date: 12/11/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBW6305G00232-3G Rev: 2

Material Size and Type: -1,-3,-5,-7/4140 Q&T STEEL

Material Specifications: STEEL: ASTM A108, ASTM A29

Heat Treatment: N/A

Plating/Finish: ZINC PLATE: ASTM B633 TYPE 1 CLASS 2

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 12/11/18

Signed: Hemat-ri bald

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com

